

ANIMAL MAGNETISM.—We were invited, the other evening, by the proprietors of Hungerford Hall, erected over the market, for domestic and other purposes, to witness an exhibition in animal magnetism by M. Lasaigne and Mdlle. Prudence. The phenomena alleged to be manifested were those of transmission of thought, taste, and vision. We are unable to believe that they are anything but clever conjuring, although it cannot be readily conceived how it can be carried on. A believer in the possibility of psychical phenomena such as these urges that the phenomena of electrical induction, of electro-magnetism, or of inducto-electricity, are really as wonderful, and just as unaccountable, but that for an intelligible explanation it is only necessary to stand on Newton's axiom, that "every particle in the universe attracts, and is attracted by, every other particle in the universe," and to grant the possibility of a state of the human mind so acutely sensitive and discrimination as to be capable of appreciating and of analysing impressions produced in its own brain by varying states of the brain of another, under or in accordance with this universal law of attraction, which compels us to admit that mutual attractions are going on between any two such masses, and are varying with every varying emotion and conception in which at least the senses and their centralisations are implicated, however difficult we may find it to be to conceive of the possibility of any state of mind so subtle and so penetrating as to be able to discriminate these impressions in particular from the infinity of others acting simultaneously from all quarters on the very same masses of nervous matter. Such a state has been recognised by Wordsworth, where he speaks of the mind in certain circumstances as being able to—

"See into the life of things;"

and Iamblichus had in view the very same possibility where he says, in his book on Egyptian Mysteries, that "the love, the affinity (the attraction) between all things renders magic possible." Well: we have probably got far enough, and must stop short of the awful depth of metaphysics into which we see that we are on the brink of being plunged. The entertainment at Hungerford Hall is certainly very curious.

PAVING STREETS AND ROADS.—Mr. Hadley, of Birmingham, has provisionally registered an invention in paving streets and roads, which consists in forming separate blocks of granite or wood into solid plates or blocks of any size or thickness, or areal section, by the introduction and application of thin cast-iron or other metal plates, frames, or boxes. The edges or jointing of these plates or blocks are to be formed with grooved or dovetailed joints, of angular, semicircular, or square, or any other form or shape; the foundations of the roads to be made solid previously to the plates, frames, or boxes being laid thereon, which plates or boxes will be laid in gravel, or suitable concrete, and be allowed to become firm before being used for traffic.

WIRE-WORK FOR CEILINGS.—Some two years back you were the first to usher forth the application of wire-work for ceilings, in lieu of lath. Since that time but little has been done in it here in England, but the statement has been copied from your paper through all nations, and translated into all languages, and the material is now being universally adopted. The objection to it here was its expense, but that ought to weigh but as a feather in the scale, as compared with the security of life and property. I can say that the ceilings already finished are perfect, without even a crack in them; unlike the wood, there is neither contraction, expansion, nor absorption. Nor have we been idle in testing it in every way: it has been subjected to the severest trial by flame, without producing even the smallest effect of ignition: in case of fire in one apartment, that alone is it confined. What is there that is so inflammable as the dry lath?—the ceiling falls, the lath is lighted, and destruction is inevitable. The cost has been reduced, viz., plain wire-work to two pence per square foot, and galvanised, to two pence three farthings per square foot.—J. A.

ENCROACHMENTS IN ST. PANCRAZ.—I am sorry to find that "A District Surveyor" is disposed to excuse or palliate this public grievance, and I cannot allow his statement to pass without observing that the change of purpose or use of the buildings is obviously no justification of the encroachment. The situation has become very eligible for business; no one can reasonably complain of its being so converted; but every person must regret the contracting of the open space between the buildings from 145 feet to 49 feet, which is now done in that part, near Southampton-street, in the New-road. As to the alleged increase of 6 feet in width given to the road and footways, I find that 2 feet 6 inches have been added to the pavement on the north side only, at the part mentioned, and nothing whatever on the south side; and that the whole width is only 49 feet, which is 9 feet less than in Oxford-street, near the Pantheon. From these simple facts, it must be evident that unless the public rights are now asserted and vindicated, we must eventually submit to the infliction of this once fine open avenue and artery being reduced to the width of a second-rate street, viz., 9 feet less than Oxford-street at its narrowest part, and that, too, whilst a law has been expressly provided to prevent it, and whilst we are making such great sacrifices to remedy the same kind of evil in other parts of the metropolis.—F. B. A.

CRANE ACCIDENT IN GLASGOW.—About five o'clock on Wednesday afternoon, an accident occurred at the tower of the suspension bridge in the course of erection at the foot of Maxwell-street, Glasgow, which we regret to learn has been attended with fatal consequences to at least one individual, and serious injury to other two workmen. The machinery employed for hoisting up stones to the top of the tower, is a crane of the common description, its parts consisting of an upright beam bolted down to a raised wooden platform, another beam crossing the top at a right angle, and a third transverse beam forming a diagonal line between the bottom of the upright and the extreme end of the cross beam. The stones were of considerable weight, which required to be hoisted to the top. The melancholy catastrophe occurred while three of the workmen were under the transverse beam, guiding the course of the stone, which was being hoisted to the top. While in mid-air, the weight of the stone acting like a lever, tore up the bolts that fastened the upright to the platform, and, as a consequence, the whole weight of the transverse beam was brought down upon the poor fellows, crushing them dreadfully. They were removed to the Royal Infirmary, where one of the unfortunate men, shortly after his admission, expired.—*North British Mail*.

EXPLORATION OF THE CATACOMBS UNDER ROME.—M. Perret, a French artist, has been engaged for six years in copying the remains of ancient art hidden in the strange city of eternal night at Rome, and he has lately returned to Paris with a collection of drawings which extends to 360 sheets in large folio, of which 154 sheets contain representations of frescoes, 65 of monuments, 23 of paintings on glass (medallions inserted in the walls and at the bottoms of vases) containing 86 subjects; 41 drawings of lamps, vases, rings, and instruments of martyrdom to the number of more than 100 subjects; and, finally, 90 contain copies of more than 500 sepulchral inscriptions. The French Government, with their usual regard for art, have negotiated with M. Perret for the purchase of his whole collection, and have obtained upwards of 7,500*l.* by a special vote from the National Assembly for the purpose. The drawings are, of course, to be published.

METALLIC TUBES.—Mr. S. Walker, jun., of Birmingham, has patented some improvements in the manufacture of metallic tubes. Claims: 1. The bonding of skelps or plates of metal in a tube-like form, and the bevelling of the edges of the same by rolling. 2. The construction of a soldering furnace, in which the flame and heated air pass in contact with those parts only to which the solder is to be applied.

THE TIMBER DUTIES.—In pursuance of an order of the Lords Commissioners of her Majesty's Treasury, the Commissioners of Customs have caused the collectors and controllers and other principal officers of Customs at the several ports in the United Kingdom to be directed to continue to charge the lower rates of duty, under the 8 & 9 Vict. c. 90, on timber and wood goods the produce of and imported from the British possessions, notwithstanding the rates of duty mentioned in the table annexed to the Act 14 & 15 Victoria, cap. 62, are in strictness (from an omission of the word "foreign") applicable to timber and wood goods generally.

WATERING-TROUGHS FOR CATTLE.—The Belfast Society for the Prevention of Cruelty to Animals have erected six watering-troughs throughout the town of Belfast. The plan of these troughs is simple: they are of cast-iron, 4 feet 5 inches long, 21 inches broad, and 15 inches deep, with a lid consisting of two parts, attached by the side rim. At one end of the trough, completely covered in from injury, is a ball-cock, by which the water enters, and, passing through holes in the lower part of the partition which separates the enclosure from the open part, a constant supply of water is kept up without the least waste. The trough rests on a stone, about 8 inches deep, with safes to protect the corners. In the cattle market, the town council, about three years since, erected a trough on the same principle. It is to be hoped that the example set at Belfast in this great improvement will be followed by other towns. We have ourselves repeatedly urged their adoption in the metropolis. It is rather notable, by the way, that these Belfast troughs have been partly erected with metropolitan money, 25*l.* having been contributed for the purpose by Mr. and Mrs. Singleton, of Wilton-crescent. The town council willingly granted the sites, and the water commissioners the water supply.

THE CAITHNESS PAVEMENT TRADE.—This trade, it seems, is in a more active state than it has ever been. It is limited only by the want of vessels to carry off the material. Mr. G. Traill, M.P., according to the Wick correspondent of the *North British Mail*, employs upwards of 200 men on his grounds of Castlehill, in raising, sawing, and dressing flags. "The marketable deposit at Castlehill," he adds, "is ten feet thick, is within half a dozen feet of the surface, and is not a hundred yards from a safe and commodious shipping port. Flags from these quarries are now to be seen in the best streets of every important town in the kingdom." To drive his flag-sawing and smoothing machinery, and, at the same time, to drain 200 acres of land, Mr. Traill is now cutting a canal through the Loch of Dorrard.

COLCHESTER ARCHEOLOGICAL SOCIETY.—On Friday last, the Rev. Mr. Jenkins, president, being in the chair, Dr. Duncan, one of the vice-presidents, read a paper on the Ancient Fortifications of Colchester. The wall, rampart, parapet, natural and artificial fosse were described, and measurements in twenty-four places given. A drawing of each part of the wall, measured upon a scale of a line to a foot, and diagrams of the guard-house and covered way in the west wall were shown. After quoting authorities on the subject, Dr. Duncan fixed the date of the wall's erection between A.D. 63—70, that is, after the Boadicean war, and before the victories of Agricola, in the north.

ENGINEERING WORKS AT GREENOCK.—Messrs. Caird and Co., of Greenock, have been engaged in the formation of several pieces of machinery amongst the largest of the kind in Scotland. One of these is a new crane erected at the Victoria Harbour for the harbour trustees, and the others two pairs of marine engines for the Royal West India Mail Steam Packet Company's new steamers *Perena* and *Dumora*, the largest engines, it is said, ever constructed in this country. Each pair of engines (on the side lever principle), has the combined power of 750 horses, the cylinders measuring 96 inches, and giving a stroke of 9 feet. The paddle shafts, two for each vessel, each weigh sixteen tons.